REMARKS

Claims 1-15 and new claims 16-20 are pending. The amendments to the claims are supported in the published application as: claim 1: ([0016], [0029], [0030]); claim 9: (dependency); and new claims 16-20: ([0030]). No new matter has been added.

Claims 1, 4, 5, 7, and 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. (Office Action, page 2)

The claim amendments address the antecedent basis and clarity issues of the rejection.

Claims 1 and 9 are rejected under 35 USC § 102 (b) as being anticipated by Boralle et al (Oligostibenoids from Gnetum venosum, Phytochemistry, 34 (5): 1403-1407, 1993). (Office Action, page 4)

Boralle describes the isolation of Gnetum C etc. by CC, TLC and HPLC after extraction of dried kernels of G. venosum with ethanol.

G. gnemon (the Gnetum in the claimed invention), which belongs to the ***Gnetaceae, is an arboreal plant*** that is widely cultivated in Southeast Asia, while ***G. venosum is an Amazonian climber.*** Therefore, a skilled artisan cannot expect the existence of the similar constituent in G.gnemon.

For instance, major constituents of camphor and cinnamon trees, which belong to *Cinnamomum* in Lauraceae, are camphor and cinnamaldehyde, respectively. The extracted material of G. venosum contains Gnetin C, but the extracted material does not contain Gnemonocide A and Gnemonocide D; which are contained in G.genomon. In addition, it was known that the leaf of G. gnemon contains flavonoids having a carbon structure of C_6-C_3-C_6, but the existence of stilbenoids having C_6-C_2-C_6 contained in seeds of G. gnemon is not recognized, as evidenced by the article enclosed herewith, Wallace, J. W. et al., *C*-Glycosylflavones in *Gnetum gnemon*, Phytochemistry 1978, 17, 1809-1810.

As the claimed invention is now limited to G.gnemon and Boralle discloses only G.venosum, it is respectfully requested that the anticipation rejection be withdrawn.

Claims 1, and 9 are rejected under 35 USC § 102 (b) as being anticipated by Conte (Storage globulins in Gnetopsida. 1. Recognition of legumin-like proteins. Giornale Botanico Italiano, (1994) Vol. 128, No. 5, pp 839-843). (Office Action, page 4)

Conte describes isolation of L-1 protein by gel filtration and anion exchange chromatography of defatted supernatant which is obtained by homogenization of G. gnemon in tris-glycine-buffer (pH 8.2) containing 4% NaC1 and centrifugation (Materials and Methods).

Conte extracted protein from seeds of G. gnemon with buffer (pH 8.2), ***but does not disclose organic low molecular compounds, like the stilbenoid.*** In Conte, the extraction and separation were ***not carried out under appropriate conditions for low molecular compounds (stilbenoid) because of the different purpose of Conte.*** See [0027] to [0030] of the published specification:

> [0030] **The extraction time is a key to the extraction of the useful ingredient from the seeds,** and aging for more than 12 hours is desirable. In this case, aging means to primarily enable enzymes in Gnetum seeds to thoroughly function. The main useful ingredients in the aged Gnetum extract include Gnetin C, Gnemonocide A, Gnemonocide C, and Gnemonocide D which have been identified by spectral analysis. The antimicrobial action decreases in order of Gnetin C>Gnemonocide C ≈ Gnemonocide D, and Gnemonocide A does not show the antimicrobial action. The antimicrobial action of Gnetin C is not dependent on pH from the acidic region to alkaline region. Especially, the merit is that the antimicrobial action is exhibited even in the neutral region, where other antimicrobial substances are no effect. The scavenging radical action (antioxidative effect) to 1,1-diphenyl-2-picrylhydrazyl (herein after called "DPPH") decreases in order of Gnetin C>Gnemonocide C ≈ Gnemonocide D>Gnemonocide A. The spot in the neighborhood of Rf value 0.5 by thin-layer chromatography (abbreviated as "TLC") developing in a mixture of chloroform-methanol (4:1, v/v) corresponds to Gnetin C and the spot in the neighborhood of Rf value 0.15 by TLC with a mixture of chloroform-methanol (2:1, v/v) as the developing solvent corresponds to Gnemonocide A. **These four compounds are polyphenol which belongs to stilbenoid.** (emphasis added)

The applicant found that the Gnetum extract from G. gnemon seed shows antimicrobial and/or antioxidative action in the course of screening test of a great many plants (over five hundreds) in order to seek a food showing antimicrobial and/or antioxidative action.

Thus the extract now claimed is ***chemically different*** for containing stilbenoids and it is respectfully requested that the rejection be withdrawn.

Claims 1-5, and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boralle et al (Oligostibenoids from Gnetum venosum, Phytochemistry, 34 (5): 1403-1407, 1993), in view of Berry (Cyclopropene fatty acids in Gnetum gnemon (L.) seeds and leaves, Journal of the Science of Food and Agriculture, (1980) Vol. 31, No. 7, pp. 657-662). (Office Action, page 5)

Boralle is discussed above. Berry teaches only cyclopropene fatty acids extracted from G. gnemon seeds and leaves which are foods. That is, Berry neither teaches nor suggests the stilbenoid of the present invention; the ***stilbenoids are extracted from the G.gnemon seeds, which always contain lipid, carbohydrate and protein as nourishment for sprouting.***

Furthermore, 50% ethanol in the present invention is employed for preparing a test body of the absorption spectrum. (See [0058] of the description.)

The new claims 16-20 are also not taught by the combination of references.

In light of this claimed ***chemical difference***, it respectfully requested that the rejection be reconsidered and withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

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Respectfully submitted,

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Attachment: Wallace, J. W. et al., *C*-Glycosylflavones in *Gnetum gnemon*, Phytochemistry 1978, 17, 1809-1810.